

# **DEFENSE INFORMATION SYSTEMS AGENCY**

P. O. BOX 4502 ARLINGTON, VIRGINIA 22204-4502

 $\frac{\mathsf{IN}\,\mathsf{REPLY}}{\mathsf{REFER}\,\mathsf{TO}:}$  Joint Interoperability Test Command (JTE)

16 Apr 10

## MEMORANDUM FOR DISTRIBUTION

SUBJECT: Special Interoperability Test Certification of the Amcom Software MediaSTAR<sup>TM</sup>

version 11

References: (a) DoD Directive 4630.5, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 2004

(b) CJCSI 6212.01E, "Interoperability and Supportability of Information Technology and National Security Systems," 15 December 2008

(c) and (d), see Enclosure 1

- 1. References (a) and (b) establish the Defense Information Systems Agency (DISA), Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification.
- 2. The Amcom Software MediaSTAR<sup>TM</sup> version 11 is hereinafter referred to as the system under test (SUT). The SUT met all of the critical interface and functional interoperability requirements and is certified for use within the Defense Switched Network (DSN) as a Customer Premise Equipment (CPE) system. The SUT meets the critical interoperability requirements set forth in Reference (c). The SUT was tested with the Nortel CS1000M-SG and Nortel Option 61C proprietary M2616 line interface. JITC analysis determined the Nortel CS1000M, Nortel CS1000E, Nortel CS1000SG, Nortel CS1000MG Nortel Option 61C, and Nortel M1 Option 81C to be functionally identical for interoperability certification purposes. Therefore, the SUT is specifically certified with these systems for this interface. No other configurations, features, or functions, except those cited within this report, are certified by the JITC. This certification expires upon changes that affect interoperability, but no later than three years from the date of Defense Information Assurance (IA)/Security Accreditation Working Group (DSAWG) accreditation.
- 3. This finding is based on interoperability testing, review of the vendor's Letters of Compliance (LoC), and DSAWG accreditation. Interoperability testing was conducted by the Telecommunication Systems Security Assessment Program (TSSAP) at the testing facility of the 346<sup>th</sup> Test Squadron at the 318<sup>th</sup> Information Operations Group, San Antonio, Texas, from 4 through 5 March 2009. Review of the LoC was completed on 5 March 2009. The DSAWG granted accreditation on 13 October 2009 based on the security testing completed by DISA-led Information Assurance test teams and published in a separate report, Reference (d). The

JITC Memo, JTE, Special Interoperability Test Certification of the Amcom Software MediaSTAR<sup>TM</sup> version 11

Certification Testing Summary (Enclosure 2) documents the test results and describes the test configuration.

4. The Functional Requirements used to evaluate the interoperability of the SUT and the interoperability statuses are indicated in Table 1.

Table 1. SUT Functional Requirements and Interoperability Status

Interface	Critical	Certified	Functional Requirements	Status	UCR 2007 Section <sup>1</sup>
2-Wire Digital Proprietary (Nortel	Nortel No <sup>2</sup> Certified <sup>3,4</sup>		2 Wire Digital Instruments / Devices Loop Signaling (TIA/EIA-470-B) (C)	Met	A7.6
M2616 Interface)			FCC and ACTA Requirements Compliance (Part 15/68) (R)	Met	A 7.5.2
	Yes	Certified	GR-815, STIGs, DoDI 8510.bb, and Security (DIACAP) (R)	Met <sup>5</sup>	A7.6 <sup>5</sup>

### NOTES:

- The UCR 2007 requirements were used based on testing timeline.
- 2 Even though this is the only interface offered by the SUT, it is listed as non critical because the UCR does not stipulate any specific required interface for CPE devices.
- Although the SUT was tested with the Nortel CS1000M-SG and Nortel Option 61C proprietary M2616 line interface, JITC analysis determined the Nortel CS1000E, Nortel CS1000M, Nortel CS1000SG, Nortel CS1000MG, and Nortel M1 Option 81C to be functionally identical for interoperability certification purposes. The SUT is specifically certified with these systems for this interface.
- 4 The SUT Nortel 2-wire digital proprietary interface to the DSN in non-intrusive monitor only with high impedance which mitigates any potential negative impact on interoperability.
- 5 Security is tested by DISA-led Information Assurance test teams and published in a separate report, Reference (d).

#### LEGEND:

LEGEND	•		
ACTA	Administrative Council for Terminal Attachments	GR-815	Generic Requirements For Network
C	Conditional		Element/Network System (NE/NS) Security
CPE	Customer Premise Equipment	JITC	Joint Interoperability Test Command
CS	Communication Server	MG	Multi-Group
DIACAP	Department of Defense Information Assurance	R	Required
	Certification and Accreditation Process	SG	Single-Group
DISA	Defense Information Systems Agency	STIGs	Security Technical Implementation Guides
DoDI	Department of Defense Instruction	SUT	System Under Test
DSN	Defense Switched Network	TIA	Telecommunications Industry Association
EIA Electronic Industries Alliance		TIA/EIA-470-	B Performance and Compatibility Requirements for
FCC	Federal Communications Commission		Telephone Sets with Loop Signaling
GR	Generic Requirements	UCR	Unified Capabilities Requirements

5. No detailed test report was developed in accordance with the Program Manager's request. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Unclassified-But-Sensitive Internet Protocol Router Network (NIPRNet) email. More comprehensive interoperability status information is available via the JITC System Tracking Program (STP). The STP is accessible by .mil/gov users on the NIPRNet at <a href="https://stp.fhu.disa.mil">https://stp.fhu.disa.mil</a>. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at <a href="http://jit.fhu.disa.mil">http://jit.fhu.disa.mil</a> (NIPRNet), or <a href="http://199.208.204.125">http://199.208.204.125</a> (SIPRNet). Information related to DSN testing is on the Telecom Switched Services Interoperability (TSSI) website at <a href="http://jitc.fhu.disa.mil/tssi">http://jitc.fhu.disa.mil/tssi</a>. Due to the sensitivity of the information, the Information Assurance Accreditation Package (IAAP) that contains the approved configuration and deployment guide must be requested directly through government civilian or uniformed military personnel from the Unified Capabilities Certification Office (UCCO), e-mail: <a href="mailto:ucco@disa.mil">ucco@disa.mil</a>.

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6. The JITC point of contact is Mr. Cary Hogan, DSN 879-2589, commercial (520) 538-2589, FAX DSN 879-4347, or e-mail to <a href="mailto-cary.hogan@disa.mil">cary.hogan@disa.mil</a>. The JITC's mailing address is P.O. Box 12798, Fort Huachuca, Arizona, 85670-2798. The tracking number for the SUT is 0826201.

## FOR THE COMMANDER:

2 Enclosures a/s

for RICHARD A. MEADOR

J. T. Schutts

Chief

Battlespace Communications Portfolio

Distribution (electronic mail):

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Department of the Army, Office of the Secretary of the Army, DA-OSA CIO/G-6 ASA (ALT), SAIS-IOQ

U.S. Marine Corps MARCORSYSCOM, SIAT, MJI Division I

DOT&E, Net-Centric Systems and Naval Warfare

U.S. Coast Guard, CG-64

Defense Intelligence Agency

National Security Agency, DT

Defense Information Systems Agency, TEMC

Office of Assistant Secretary of Defense (NII)/DOD CIO

U.S. Joint Forces Command, Net-Centric Integration, Communication, and Capabilities

Division, J68

Defense Information Systems Agency, GS23

# **ADDITIONAL REFERENCES**

- (c) Defense Information Systems Agency, "Department of Defense Networks Unified Capabilities Requirements," 21 December 2007
- (d) Air Force Test Facility, "Final Information Assurance Assessment Report of Amcom Software MediaSTAR<sup>TM</sup> call logging and recording system version 11," 13 October 2009

# **CERTIFICATION TESTING SUMMARY**

- **1. SYSTEM TITLE.** Amcom Software MediaSTAR<sup>TM</sup> version 11; hereinafter referred to as the system under test (SUT).
- **2. PROPONENT.** Headquarters United States Army Information Systems Engineering Command (HQ USAISEC).
- **3. PROGRAM MANAGER.** Gary Kitsmiller, AMSEL-IE-IS, Building 53301, Fort Huachuca, Arizona, 85613-5300, e-mail: gary.kitsmiller@us.army.mil.
- **4. TESTER.** Telecommunication Systems Security Assessment Program (TSSAP) testing facility of the 346th Test Squadron at the 318th Information Operations Group, United States Air Force, San Antonio, Texas.
- **5. SYSTEM UNDER TEST DESCRIPTION.** MediaSTAR<sup>TM</sup> is a passive call logging and recording solution which can improve Call Center management by providing Supervisors with the ability to:
  - View operator activity
  - See which agents are Idle
  - View the length of time agents are on a call
  - Record all calls to/from Agents automatically
  - Listen to live phone conversations
  - Listen to calls that have been recorded and saved.

MediaSTAR<sup>TM</sup> supports traditional call logging and recording system features. MediaSTAR<sup>TM</sup> only records digital station side extensions. Calls are recorded along with an embedded date, time, and call duration. Once recorded, calls are searchable in many ways such as position, call duration, date, time, or any comments or flags that have been applied. The SUT accomplishes this via a two-wire M2616 digital proprietary non intrusive high-impedance tap to the switch as depicted in the test configuration.

**6. OPERATIONAL ARCHITECTURE.** The Unified Capabilities Requirements (UCR) Defense Switched Network (DSN) architecture in Figure 2-1 on the following page shows the relationship of the SUT to the DSN switches.

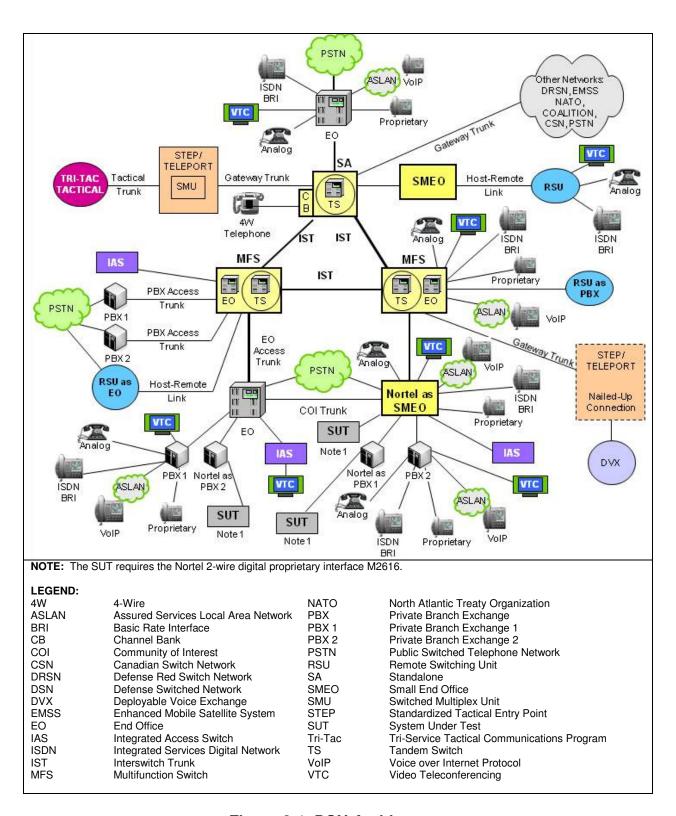


Figure 2-1. DSN Architecture

**7. REQUIRED SYSTEM INTERFACES.** Requirements specific to the SUT and interoperability results are listed in Table 2-1. These requirements are derived from the Interface and Functional Requirements and verified through testing conducted by the TSSAP testing facility of the 346<sup>th</sup> Test Squadron at the 318<sup>th</sup> Information Operations Group, San Antonio, Texas. In addition, requirements were met through review of the vendor-provided Letter of Compliance (LoC). These requirements were obtained from the UCR 2007 based on the testing timeline.

Table 2-1. SUT Functional Requirements and Interoperability Status

Interface	Critical	Certified	Functional Requirements	Status	UCR 2007 Section <sup>1</sup>
2-Wire Digital Proprietary	No <sup>2</sup> Certified <sup>3,4</sup>		2 Wire Digital Instruments / Devices Loop Signaling (TIA/EIA-470-B) (C)	Met	A7.6
(Nortel M2616 Interface)	NO Gertined	FCC and ACTA Requirements Compliance (Part 15/68) (R)	Met	A 7.5.2	
	Yes	Certified	GR-815, STIGs, DoDI 8510.bb, and Security (DIACAP) (R)	Met <sup>5</sup>	A7.6 <sup>5</sup>

#### NOTES:

- 1 The UCR 2007 requirements were used based on testing timeline.
- Even though this is the only interface offered by the SUT, it is listed as non critical because the UCR does not stipulate any specific required interface for CPE devices.
- Although the SUT was tested with the Nortel CS1000M-SG and Nortel Option 61C proprietary M2616 line interface, JITC analysis determined the Nortel CS1000E, Nortel CS1000M, Nortel CS1000SG, Nortel CS1000MG, and Nortel M1 Option 81C to be functionally identical for interoperability certification purposes. The SUT is specifically certified with these systems for this interface.
- 4 The SUT Nortel 2-wire digital proprietary interface to the DSN in non-intrusive monitor only with high impedance which mitigates any potential negative impact on interoperability.
- 5 Security is tested by DISA-led Information Assurance test teams and published in a separate report, Reference (d).

### LEGEND:

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ACTA	Administrative Council for Terminal Attachments	GR-815	Generic Requirements For Network
С	Conditional		Element/Network System (NE/NS) Security
CPE	Customer Premise Equipment	JITC	Joint Interoperability Test Command
CS	Communication Server	MG	Multi-Group
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DISA	Defense Information Systems Agency	STIGs	Security Technical Implementation Guides
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DSN	Defense Switched Network	TIA	Telecommunications Industry Association
EIA	EIA Electronic Industries Alliance		B Performance and Compatibility Requirements for
FCC	Federal Communications Commission		Telephone Sets with Loop Signaling
GR	Generic Requirements	UCR	Unified Capabilities Requirements
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**8. TEST NETWORK DESCRIPTION.** The SUT was tested at the TSSAP in a manner and configuration similar to that of the DSN operational environment. Testing the system's required functions and features was conducted using the test configurations in Figure 2-2.

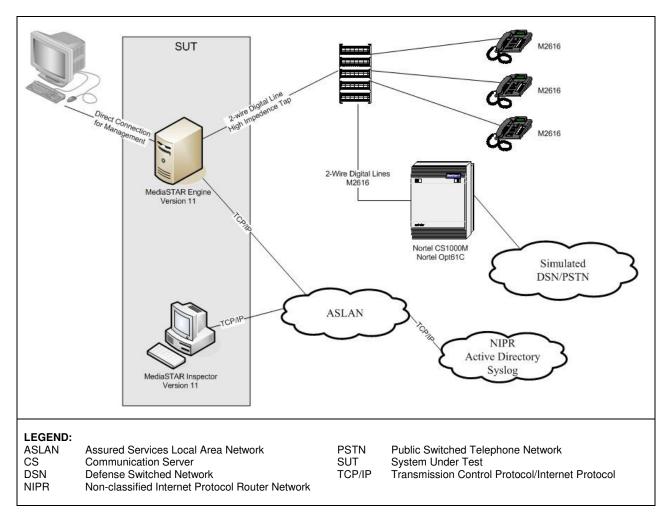


Figure 2-2. SUT Test Configuration

**9. SYSTEMS CONFIGURATIONS.** Table 2-2 provides the system configurations, hardware, and software components tested with the SUT. The SUT was tested in an operationally realistic environment to determine interoperability with the DSN switch noted in the table below. The SUT is certified for use specifically with the Nortel Meridian digital switching systems listed on the UC Approved Products List (APL).

**Table 2-2. SUT Tested Configuration** 

System Name	Software Release	
Nortel Merdian 1 CS1000M	4.5W with specified product enhanced packages	
Nortel Merdian 1 Option 61C	24.25	
Nortel Digital Telephone	M2616	
RAE	Active Directory (Windows 2003 Server)	
HAL	Log Server (Kiwi version 8.2.18)	

Table 2-2. SUT Tested Configuration (continued)

System Under Test	Hardware	Software
Amcom Software MediaSTAR <sup>™</sup>	MediaSTAR System Dell PE 2950 Audio Codes NGX800 PCI Board	Windows 2003 Server SP2 Microsoft SQL 2005 SP3 Using Audio Codes Smartworks v 3.12 Firmware MediaSTARengine.exe Version 11.10.0.26
Version 11	Customer Monitoring System MediaSTAR Inspector Dell Optiplex 755	Windows XP Professional SP3 MediaSTARinspector.exe Version 11.10.0.26

**NOTE:** Although the SUT was tested with the Nortel CS1000M-SG and Nortel Option 61C proprietary M2616 line interface, JITC analysis determined the Nortel CS1000E, Nortel CS1000M, Nortel CS1000SG, Nortel CS1000MG, and Nortel M1 Option 81C to be functionally identical for interoperability certification purposes. Therefore, the SUT is also certified with these systems for this interface

### LEGEND:

CS Communication Server RAE Required Ancillary Equipment

PCI Peripheral Component Interconnect SP Service Package

E Power Edge SQL Structured Query Language

### 10. TEST LIMITATIONS. None

### 11. TEST RESULTS

- **a. Discussion.** The SUT minimum interoperability interface requirements were met through both interoperability certification testing conducted at the TSSAP and review of the vendor's LoC.
- **b. Test Conduct.** Multiple two-way test calls at different durations (15-minute, 30-minute, 1-hour, 24-hours, and 48-hours) were placed over the test network shown in Figure 2-2 via all the combinations in Table 2-1. Testing was accomplished to determine any impact to the servicing switch. When connected to the interfaces certified in this letter, the SUT was transparent to the switching systems or lines interfaced, causing no degradation of service or negative impact.

This SUT is a non-intrusive passive recording and monitoring device which interfaces to the switch via a two-wire M2616 digital proprietary high-impedance tap as depicted in the test configuration.

- **c. Test Summary.** The SUT is strictly a non-intrusive call monitoring system. It uses a Nortel proprietary interface as its connection to the DSN. The SUT met the critical interface requirements for a Customer Premise Equipment (CPE) as set forth in the UCR 2007 for the interfaces depicted in Table 2-1, as set forth in Reference (c), and is certified for joint use within the DSN.
- **12. TEST AND ANALYSIS REPORT.** No detailed test report was developed in accordance with the Program Manager's request. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Unclassified-But-Sensitive Internet Protocol Router Network (NIPRNet) e-mail. More comprehensive interoperability status information is available via the JITC System

Tracking Program (STP). The STP is accessible by .mil/gov users on the NIPRNet at https://stp.fhu.disa.mil. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at http://jit.fhu.disa.mil (NIPRNet), or http://199.208.204.125 (SIPRNet). Information related to DSN testing is on the Telecom Switched Services Interoperability (TSSI) website at http://jitc.fhu.disa.mil/tssi. Due to the sensitivity of the information, the Information Assurance Accreditation Package (IAAP) that contains the approved configuration and deployment guide must be requested directly through government civilian or uniformed military personnel from the Unified Capabilities Certification Office (UCCO), e-mail: ucco@disa.mil.